

Exhibit H

**IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF TEXAS
HOUSTON DIVISION**

WESTERN GECO, L.L.C.,

Plaintiff,

vs.

**ION GEOPHYSICAL
CORPORATION,**

Defendant.

Civil Action No. 4:09-CV-1827

**DECLARATION OF RAYMOND S. SIMS
ANALYSIS OF PREJUDGMENT INTEREST**

September 28, 2012

I, Raymond S. Sims, declare as follows:

1. I have been retained as an expert in this case by counsel for WesternGeco L.L.C. (“WesternGeco”). I previously submitted expert reports in this case on February 21, 2012, March 16, 2012, July 1, 2012 and July 20, 2012. Three of these reports quantified the amount of lost profits and reasonable royalty damages owed to WesternGeco by ION Geophysical Corporation (“ION”) for its infringement of United States Patent Nos. 6,691,038 (“the ‘038 patent”), 6,932,017 (“the ‘017 patent”),¹ 7,080,607 (“the ‘607 patent”), 7,162,967 (“the ‘967

¹ I understand that the parties agreed that the ‘017 patent would not be presented at trial in order to narrow the disputes for the jury.

patent") and 7,293,520 ("the '520 patent") (collectively, "patents-in-suit").² In addition, I provided expert testimony at trial in this case on July 31, 2012, August 1, 2012 and August 2, 2012.

2. My professional and educational background is reflected in my previously submitted expert reports and incorporated herein by reference.

3. I understand that the jury returned a verdict in this case on August 16, 2012. From my review of the jury's verdict form, I understand that the jury found that ION infringed all of the patent claims WesternGeco asserted against ION and that none of the asserted claims are invalid for anticipation, non-enablement or obviousness.³ The jury also found ION's infringement to be willful.⁴ I also understand that the jury awarded WesternGeco damages for ION's infringement of the patents-in-suit consisting of \$93,400,000 of lost profits and \$12,500,000 of reasonable royalties.⁵

4. I have been asked to determine the amount of prejudgment interest that WesternGeco is owed by ION on the lost profits and reasonable royalty damages awarded by the jury.

Prejudgment Interest

5. My determination of the prejudgment interest owed by ION on the jury's damages award is based on the following:

a. **Lost Profits Damages** – The lost profits amount of \$93,400,000 awarded by the jury was not broken down by period. I assumed that annual lost

² My expert reports also quantified the amount of lost profits and reasonable royalty damages owed to WesternGeco by Fugro-Geoteam, Inc., Fugro-Geoteam AS, Fugro Norway Marine Services AS, Fugro, Inc., Fugro (USA), Inc. and Fugro GeoServices, Inc. (collectively, "Fugro"). However, I understand that, during the course of trial, the Court granted WesternGeco and Fugro's stipulated dismissal of Fugro from the litigation. (D.I. 525)

³ Verdict Form in Case No. 4:09-cv-1827. (D.I. 536)

⁴ Verdict Form in Case No. 4:09-cv-1827. (D.I. 536)

⁵ Verdict Form in Case No. 4:09-cv-1827. (D.I. 536)

profits damages were incurred evenly throughout the year in which a given lost survey ended. Based on my analysis of WesternGeco's lost profits as reflected in my expert reports, I was able to allocate the jury's lump sum lost profits amount to annual periods during the damages period. The results of my analysis are reflected on Exhibit 4.0 as attached hereto.

- b. Reasonable Royalty Damages –** The reasonable royalty damages of \$12,500,000 awarded by the jury was not broken down by period. I assumed the reasonable royalty amount awarded by the jury would have been paid quarterly in the quarter after the infringing revenue was earned. I was able to allocate the jury's reasonable royalty award by period by determining the effective royalty rate awarded by the jury and applying it to the infringing royalty base as reflected in my July 20, 2012 expert report. The results of my analyses are reflected on Exhibit 5.0 through Exhibit 5.2 as attached hereto.
- c. Interest Rate –** I have been advised by counsel that the interest rate to be applied to determine the amount of prejudgment interest owed to WesternGeco by ION is set by statute.⁶ Under that statute, the appropriate interest rate to use is the U.S. Prime Bank rate, but no less than 5% and no greater than 15%. Additionally, interest should be compounded annually. Accordingly, the interest rate I utilized to calculate prejudgment interest is the U.S. Prime Bank rate or 5% in years where the U.S. Prime Bank rate

⁶ Tex. Fi. Code Ann. § 304.003. I understand that although this statute specifies post-judgment interest, Texas common law allows for prejudgment interest to accrue at the same rate as that used for post-judgment interest. See, e.g., *Int'l Turbine Servs, Inc. v. VASP Brazilian Airlines*, 278 F. 3d 494, 500 (5th Cir. 2002).

was less than 5%.⁷ Alternatively, I have calculated prejudgment interest based on the U.S. Prime Bank rate over the damages period. I have calculated prejudgment interest through September 30, 2012 (the assumed date that the judgment in this matter will be entered) using each interest rate.

i. **Prejudgment Interest Amount Based on Statutory Rate:** Based on my analysis, I conclude that the prejudgment interest owed by ION on the damages awarded by the jury is \$8,124,702.⁸ Combining the \$93,400,000 lost profits and \$12,500,000 reasonable royalty amounts awarded by the jury with the prejudgment interest amount calculated above results in a total damages amount of \$114,024,702.⁹

ii. **Prejudgment Interest Amount Based on the U.S. Prime Bank Rate:** Based on my analysis, I conclude that, if the U.S. Prime Bank Rate is used, the prejudgment interest owed by ION on the damages awarded by the jury is \$5,239,499.¹⁰ Combining the \$93,400,000 lost profits and \$12,500,000 reasonable royalty amounts awarded by the jury with the prejudgment interest amount calculated above results in a total damages amount of \$111,139,499.¹¹

⁷ At no time during the relevant period did the U.S. Prime Bank rate exceed 15%.

⁸ Exhibit 1.0.

⁹ Exhibit 1.0.

¹⁰ Exhibit 2.0.

¹¹ Exhibit 2.0.

6. To the extent judgment is entered before or after September 30, 2012 (the assumed date that the judgment in this matter will be entered), the amount of prejudgment interest owed would need to be adjusted. Therefore, I have calculated the daily prejudgment interest amount which should be added to the amounts calculated above if the date of judgment is after September 30, 2012 (or which should be subtracted from the amounts calculated above if the date of judgment is before September 30, 2012).

a. **Daily Prejudgment Interest Based on Statutory Rate:** If judgment is entered before September 30, 2012, the prejudgment interest award of \$8,124,702 should be reduced by \$15,621¹² for each day for the number of days prior to September 30, 2012 that the judgment is entered. Similarly, if judgment is entered after September 30, 2012, the prejudgment interest award of \$8,124,702 should be increased by \$15,621¹³ for each day after September 30, 2012 until the date of judgment.

b. **Daily Prejudgment Interest Based on the U.S. Prime Bank Rate:** In the event the U.S. Prime Bank Rate is used, if judgment is entered before September 30, 2012, the prejudgment interest award of \$5,239,499 should be reduced by \$9,891¹⁴ for each day for the number of days prior to September 30, 2012 that the judgment is entered. Similarly, if judgment is entered after September 30, 2012, the prejudgment interest award of

¹² Exhibit 1.0.

¹³ Exhibit 1.0.

¹⁴ Exhibit 2.0.

\$5,239,499 should be increased by \$9,891¹⁵ for each day after September 30, 2012 until the date of judgment.

Respectfully submitted:



Raymond S. Sims
Vice President
Charles River Associates
September 28, 2012

¹⁵ Exhibit 2.0.

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Exhibit 1.0

Prejudgment Interest on Total Damages (Based on U.S. Prime Bank Rate But No Less Than 5%)

Calendar Year	Reasonable Royalty [A]	Lost Profits [B]	Total Damages [C]	Prejudgment Interest Rates [D]	Prejudgment Interest Amount on Current Period Amount [E]	Total Damages Payments and Interest - Beginning of Period [F]		Prejudgment Interest Rates [G]	Prejudgment Interest Amount on Beginning Cash Available [H]	Total Prejudgment Interest Amount [I]	Total Damages Payments and Interest - End of Period [J]
Q4 2007	\$11,404		\$11,404	1.88%	\$107			1.88%	-	\$107	\$11,511
2008	1,169,050		1,169,050	5.09%	29,752	\$11,511	5.09%	\$586	30,338	1,210,899	
2009	3,955,710		3,955,710	5.00%	98,893	1,210,899	5.00%	60,545	159,438	5,326,047	
2010	4,395,062	\$27,496,227	31,891,288	5.00%	797,282	5,326,047	5.00%	266,302	1,063,585	38,280,920	
2011	2,968,774	40,547,031	43,515,805	5.00%	1,087,895	38,280,920	5.00%	1,914,046	3,001,941	84,798,667	
Q1-Q3 2012	0	25,356,742	25,356,742	2.72%	689,343	84,798,667	3.75%	3,179,950	3,869,293	114,024,702	
Total	\$12,500,000	\$93,400,000	\$105,900,000							\$8,124,702	

Total Damages and Prejudgment Interest

\$114,024,702

Daily Rate [K]

0.0137%

Daily PJI Amount After Q3 2012 [L]

\$15,621

[A] Exhibit 5.0.

[B] Exhibit 4.0.

[C] = [A] + [B].

[D] The Tex Fi. Code Ann. § 304.003 states that interest should be based on the prime rate but it should not be less than 5% or greater than 15%. The U.S. Prime Bank Rate was greater than 5% in 2007 and 2008 and less than 5% in 2009-2012. See Exhibit 3.0. Therefore, 5% was used in years 2009-2012. The Q4 2007 rate is estimated by multiplying the 2007 Annual U.S. Prime Bank Rate by 1/4. The Q1-Q3 2012 rate is estimated by multiplying 5% by 199 days / 366 days.

[E] = ([C] x [D]) / 2. Assumes mid-point convention. 2012 assumed lost profits were received evenly from 1/1/2012-5/30/2012.

[F] = Prior [J].

[G] = [D]. The Q1-Q3 2012 rate is estimated by multiplying 5% by 3/4.

[H] = [F] x [G].

[I] = [E] + [H]. Prejudgment interest is calculated through 9/30/2012.

[J] = [C] + [F] + [I].

[K] Daily rate calculated on a per-day basis as follows: (5% Annual Rate) / 366.

[L] = Total Damages and Prejudgment Interest x [K].

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Exhibit 2.0

Prejudgment Interest on Total Damages (Based on U.S. Prime Bank Rate)

Calendar Year	Reasonable Royalty [A]	Lost Profits [B]	Total Damages [C]	Prejudgment Interest Rates [D]	Prejudgment Interest Amount on Current Period Amount [E]	Total Damages Payments and Interest - Beginning of Period [F]		Prejudgment Interest Rates [G]	Prejudgment Interest Amount on Beginning Cash Available [H]	Total Prejudgment Interest Amount [I]	Total Damages Payments and Interest - End of Period [J]
Q4 2007	\$11,404		\$11,404	1.88%	\$107			1.88%		\$107	\$11,511
2008	1,169,050		1,169,050	5.09%	29,752	\$11,511	5.09%	\$586	30,338	1,210,899	
2009	3,955,710		3,955,710	3.25%	64,280	1,210,899	3.25%	39,354	103,635	5,270,244	
2010	4,395,062	\$27,496,227	31,891,288	3.25%	518,233	5,270,244	3.25%	171,283	689,516	37,851,049	
2011	2,968,774	40,547,031	43,515,805	3.25%	707,132	37,851,049	3.25%	1,230,159	1,937,291	83,304,145	
Q1-Q3 2012	0	25,356,742	25,356,742	1.77%	448,073	83,304,145	2.44%	2,030,539	2,478,612	111,139,499	
Total	\$12,500,000	\$93,400,000	\$105,900,000							\$5,239,499	

Total Damages and Prejudgment Interest

\$111,139,499

Daily Rate [K]

0.0089%

Daily PJI Amount After Q3 2012 [L]

\$9,891

[A] Exhibit 5.0.

[B] Exhibit 4.0.

[C] = [A] + [B].

[D] Exhibit 3.0. The Q4 2007 rate is estimated by multiplying the 2007 Annual U.S. Prime Bank Rate by 1/4. The Q1-Q3 2012 rate is estimated by multiplying the 2012 Annual U.S. Prime Bank Rate by 199 days / 366 days.

[E] = ([C] x [D]) / 2. Assumes mid-point convention. 2012 assumed lost profits were received evenly from 1/1/2012-5/30/2012.

[F] = Prior [J].

[G] = [D]. The Q1-Q3 2012 rate is estimated by multiplying the 2012 Annual U.S. Prime Bank Rate by 3/4.

[H] = [F] x [G].

[I] = [E] + [H]. Prejudgment interest is calculated through 9/30/2012.

[J] = [C] + [F] + [I].

[K] Daily rate calculated on a per-day basis as follows: (August 2012 Monthly Annual U.S. Prime Bank Rate) / 366.

[L] = Total Damages and Prejudgment Interest x [K].

WesternGeco WesternGeco, L.L.C. v. ION Geophysical Corporation, et al.**Exhibit 3.0
Federal Reserve U.S. Prime Bank Rate**

Year	Month	Annual Monthly U.S. Prime Bank Rate [A]	Annual U.S. Prime Bank Rate [B]
	Oct-07	7.74%	
	Nov-07	7.50%	
	Dec-07	7.33%	
2007			7.52%
2008			5.09%
2009			3.25%
2010			3.25%
2011			3.25%
	Jan-12	3.25%	
	Feb-12	3.25%	
	Mar-12	3.25%	
	Apr-12	3.25%	
	May-12	3.25%	
	Jun-12	3.25%	
	Jul-12	3.25%	
	Aug-12	3.25%	
2012			3.25%

[A] <http://www.federalreserve.gov/releases/H15/data.htm>.

[B] <http://www.federalreserve.gov/releases/H15/data.htm>. 2007 Annual U.S. Prime Bank Rate calculated as the average of October - December 2007 Annual Monthly U.S. Prime Bank Rates. 2012 Annual U.S. Prime Bank Rate calculated as the average of January - August 2012 Annual Monthly U.S. Prime Bank Rates.

WesternGeco, L.L.C. v. ION Geophysical Corporation, et al.**Exhibit 4.0****Annual Lost Profits Based on Verdict Form**

		2009	2010	2011	2012	Total
Lost Profits Damages - Bittleston Patents (All Accused Surveys)	[A]	\$7,559,563	\$55,359,576	\$53,290,347	\$42,864,073	\$159,073,560
Lost Profits Damages - Bittleston Patents (Accused Fugro Surveys)	[B]	<u>7,559,563</u>	<u>27,873,232</u>	<u>12,757,888</u>	<u>17,516,445</u>	<u>65,707,129</u>
Lost Profits Damages - Bittleston Patents (Accused Non-Fugro Surveys)	[C]	\$0	\$27,486,344	\$40,532,458	\$25,347,629	\$93,366,431
Lost Profits Damages - Bittleston Patents (Accused Non-Fugro Surveys) as a Percent of Total	[D]	0.0%	29.4%	43.4%	27.1%	100.0%
Annual Lost Profits Based on Verdict Form	[E]	<u>\$0</u>	<u>\$27,496,227</u>	<u>\$40,547,031</u>	<u>\$25,356,742</u>	<u>\$93,400,000</u>

[A] Second Supplemental Exhibit 5.4S.

[B] Second Supplemental Exhibit 6.4S.

[C] = [A] - [B]. Lost profits awarded by the jury were based on surveys which were started prior to 2/21/2012. The first accused lost profit non-Fugro survey ended 3/2/2010 and the last accused lost profit non-Fugro survey ended 5/30/2012. See Second Supplemental Exhibit 11.1S.

[D] = [C] / Total [C].

[E] = \$93,400,000 x [D]. See Verdict Form in Case No. 4:09-cv-1827.

WesternGeco, L.L.C. v. ION Geophysical Corporation, et al.**Exhibit 5.0****Reasonable Royalty Based on Verdict Form by Quarter**

Quarter	Reasonable Royalty	Reasonable Royalty Owed - Beginning of Period	Year	Total by Year
[A]	[B]	[C]		[D]
Q3 2007	\$11,404	-		
Q4 2007	524,580	\$11,404	2007	\$11,404
Q1 2008	214,039	524,580		
Q2 2008	214,039	214,039		
Q3 2008	216,392	214,039		
Q4 2008	216,392	216,392	2008	1,169,050
Q1 2009	1,232,742	216,392		
Q2 2009	1,246,439	1,232,742		
Q3 2009	1,260,137	1,246,439		
Q4 2009	1,260,137	1,260,137	2009	3,955,710
Q1 2010	1,033,492	1,260,137		
Q2 2010	1,044,975	1,033,492		
Q3 2010	1,056,458	1,044,975		
Q4 2010	1,056,458	1,056,458	2010	4,395,062
Q1 2011	1,229,346	1,056,458		
Q2 2011	682,970	1,229,346		
Q3 2011		682,970	2011	2,968,774
Total	\$12,500,000	\$12,500,000		\$12,500,000

[A] The first invoice date of an ION DigiFIN sale to a non-Fugro customer was 9/29/2007. The last available invoice date was 5/20/2011.

[B] Exhibit 5.1. Calculated based on the number of days in each quarter.

[C] = Prior [B]. Assumes one quarter delay in royalty payments.

[D] = Sum of [C] for each year.

WesternGeco, L.L.C. v. ION Geophysical Corporation, et al.**Exhibit 5.1****Annual Reasonable Royalty Based on Verdict Form**

	2007	2008	2009	2010	2011	Total
ION DigiFIN System Revenue From Non-Fugro Customers [A]	\$1,812,219	\$2,910,668	\$16,903,702	\$14,171,525	\$6,465,749	\$42,263,862
Effective Royalty Rate Based on Reasonable Royalty Amount Awarded by the Jury [B]	29.6%	29.6%	29.6%	29.6%	29.6%	29.6%
Annual Reasonable Royalty Based on Verdict Form [C]	\$535,984	\$860,862	\$4,999,455	\$4,191,384	\$1,912,316	\$12,500,000

[A] Second Supplemental Exhibit 12.0. The first invoice date of an ION DigiFIN sale to a non-Fugro customer was 9/29/2007. The last available invoice date was 5/20/2011. See Exhibit 9.3S.

[B] Exhibit 5.2.

[C] = [A] × [B].

WesternGeco, L.L.C. v. ION Geophysical Corporation, et al.

Exhibit 5.2

Effective Royalty Rate Based on Reasonable Royalty Amount Awarded by the Jury

		<u>Total</u>
Reasonable Royalty Based on Verdict Form	[A]	\$12,500,000
ION DigiFIN System Revenue From Non-Fugro Customers	[B]	<u>\$42,263,862</u>
Effective Royalty Rate Based on Reasonable Royalty Amount Awarded by the Jury	[C]	<u>29.6%</u>

[A] = \$12,500,000. See Verdict Form in Case No. 4:09-cv-1827.

[B] Second Supplemental Exhibit 12.0.

[C] = [A] / [B].